

between them. In spirit they are tough and cartilaginous, rather over an inch long and about the same in their greatest width at the base, and each contains only a single embryo.

The shells when extracted from the capsules are an inch in length, consist of  $5\frac{1}{2}$  whorls, the last showing the commencement of the colour-markings and the columellar plaits of the adult shell.

Since the above was written Mr. Jukes-Browne has received from Mr. Banfield a photograph of a more complete mass of egg-capsules. It has very much the form of an elongate fir-cone, and the openings in it appear to be arranged in longitudinal, slightly oblique, and regular rows, the lower margin of each opening exhibiting a short spike-like projection which is the termination of a ridge upon one side of the capsules.

E. A. SMITH.

NOTE ON FEEDING OF *HELIX DESERTORUM*, FORSK., IN CAPTIVITY. (Read 14th January, 1910.)—Specimens of this snail were taken on 3rd January, 1909, near the Gizeh Pyramids, where, except one individual found on a stone covered with lichen, none were seen far from the traces of higher vegetation, at that time dried up. Three examples were kept alive at Mortehoe in Devon from the first week in May till 12th September of the same year, when they died seemingly from excess of moisture in the air and their food, which was principally lettuce. They ate sparingly of the leaf of cauliflower and of a bean, and consumed with avidity the petals of a Niphetos rose, but did not appear to care for those of other species. They liked the petals of calceolaria, and ate those of pink carnations, but not those of the red. They were further offered petals of *Schizanthus*, leaves of celery, sedium, saxifrages, turnip, strawberry, *Potentilla*, dandelion, and spinach, but did not care for any of them.

MRS. G. B. LONGSTAFF, F.L.S.

ON THE OCCURRENCE IN THE BRITISH ISLES OF LIVING SPECIMENS OF *PISIDIUM STEENBUCHII*, MÖRCH, AND *P. LILLJEBORGII*, CLESSIN, WITH NOTES OF NEW RECORDS OF *PISIDIA* FOR THE LAKE DISTRICT, AND FRESH LOCALITIES FOR *P. SUPINUM*, A. SCHM. (Read 12th November, 1909.)—A short time since Mr. F. F. Laidlaw forwarded for determination some specimens of *Pisidium* from Lochan a' Chait, a small tarn situated to the north of Loch Tay on the flanks of Ben Lawers, Perthshire, at an elevation of 2250 feet. These proved to be examples of *P. Steenbuchii*, Mörch, a northern form, which had hitherto only been found fossil in these islands. Thus it had been recognized in Holocene deposits at Shand Street, Tooley Street (Surrey), Gayfield (Edinburgh), and in a Shell Marl at Inchiquin (co. Clare, Ireland); whilst in the Pleistocene it occurs in the Crayford-Erith shell-beds, and in the freshwater beds of the Forest Bed at West Runton (Norfolk).

A little later Mrs. Longstaff sent me some *Pisidia* from the Lake District. These included examples of an oval form of *P. Steenbuchii* from Abbey Holme in Cumberland, and Patterdale on the borders of Westmorland, that had been collected twenty-five years ago.

The following species in her collection were also new, in name at least, to the district, viz.:—*Pisidium subtruncatum* from Blaithewaite and near Carlisle, *P. obtusale* from Dalston and Wreay, and *P. personatum* from Rockcliffe. The last-named species has also been received from Captain W. J. Farrer, from Bassenthwaite Lake, whilst the same observer has collected from ditches thereabout *P. pulchellum*, another new record for the Cumberland fauna.

From Mr. Stellfox, through Mr. Kennard, specimens of great interest have been received from Lough Aguse, co. Fermanagh, Ireland (alt. 450 feet). After very careful comparison it would seem that these are British representatives of the Swedish species *P. Lilljeborgii*, Clessin, a form closely allied to, but apparently distinct from, both *P. obtusale* and *P. Steenbuchii*. There are at present, it is true, only four specimens; still, though more globose than my Norwegian specimens, there cannot, I think, be any doubt as to their identity.

Of the fifteen living forms of *Pisidium* known to me from North-Western Europe, fourteen have, therefore, now been met with in these islands. One only, the little *P. parvulum*, Clessin, a Scandinavian species, about the size of a big pin's head, has not yet been reported. Since, however, like *P. supinum*, it has a relatively strong hinge, it may be looked for in running waters among sand, in upland streams, where it has quite possibly been overlooked.

By way of supplement to the note on the distribution of *P. supinum* in Britain, that was read at the May meeting of this Society (Proc. Malac. Soc., vol. viii, p. 330), the following further localities for this species may now be enumerated. From Budworth Mere, Cheshire, Mr. A. S. Kennard has received a single pair of fine valves. During the summer Mr. C. Oldham traced the species along the Grand Junction Canal, obtaining it from Rickmansworth and Tring in Hertfordshire, Marsworth in Bucks, and sparingly at Blisworth in Northamptonshire. Mr. J. E. Cooper has found the species sparsely in mud in a stream at Iver (Bucks) and at Byfleet (Surrey); specimens have just been forwarded by Mr. H. C. Napier from rejectamenta of the Cherwell at Mesopotamia, Oxford; whilst Mr. H. Overton has taken it in the Severn at Bewdley.

B. B. WOODWARD.

NOTE ON *ATHORACOPHORUS SCHAUINSLANDI*. (Read 14th January, 1910).—Quite recently it has been my good fortune to obtain, through the kindness of Mr. T. H. Turner, Stephens Island, live specimens of *Athoracophorus Schauinslandi*, Plate, and I am now able to supply the following additional information.

The living animal has a lanceolate, depressed convex body when at rest, and a full-grown specimen showed the following dimensions: length 37, breadth 15, height 6 mm. When crawling the animal was not much higher, but more narrowed, and longitudinally extended, the length being 55, breadth 10 mm. Colour yellowish-brown, with the minute granules of the notum black; the large papillæ, which usually only appear through contraction when preserved in alcohol, are marked by whitish spots surrounded by black; mantle-area yellowish, margined with black; tentacles greyish. The latter are rather short, slightly clavate, with an annular swelling at the base, 3 to 4 mm. long when fully extended. Notum minutely and densely granular all over; the large papillæ are sometimes sharply raised, but after a short period their turgidity disappears, and the whole dorsum is left only minutely granular. The grooves are distinct, and the median furrow of the head-shield is always distinct. The specimens at the disposal of Professor Plate had no median groove on the head-shield, no doubt as a result of the mode of preservation. All the living specimens I examined had this median groove very distinct.

The eggs are laid in clusters of twenty to thirty; they are yellowish-white, semi-transparent, globular or slightly oval, the surface distinctly puckered; diam. 3 mm.

H. SUTER.